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APPLICATION NO.	F	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
10/720,676 11/25/2003		11/25/2003	Lloyd G. Ratchford	111418.00420	6269	
27557	7590	11/18/2004		EXAMINER		
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WASHING		RE AVENUE, N.W. 20037		ART UNIT	PAPER NUMBER	
				2833	2833	

DATE MAILED: 11/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  Examinate of time may be available under the provisions of 3 CPR 1.136(s). In no event, however, may a reply be timely filed  If the period for reply specified above is less han thirty (20) days, a reply whith the statatory minimum of thirty (20) days will be considered timely.  If the period for reply specified above is less han thirty (20) days, a reply whith the statatory minimum of thirty (20) days will be considered immly.  If the period for reply specified above is less han thirty (20) days, a reply whith the statatory minimum of thirty (20) days will be considered immly.  If the period for reply specified above is less han thirty (20) days, a reply whith the state of the communication.  Failure to reply whith the set or extended period for reply will, by statutes, cause the application to become ABANODIED (35 U.S.C. § 173).  Status  1)  Responsive to communication(s) filed on 30 August 2004.  2a)  This action is FINAL.  2b) This action is FINAL.  2b) This action is FINAL.  2b) This action is FINAL.  2c)  Disposition of Claims  4)  Claim(s) 1,2 and 4-9 is/are pending in the application.  4a) Of the above claim(s) is/are withdrawn from consideration.  5  Claim(s) 1,2 and 4-9 is/are rejected.  7) Claim(s) is/are allowed.  Claim(s) is/are objected to.  Claim(s) is/are objected to.  Claim(s) is/are objected to by the Examiner.  Application Papers  9) The specification is objected to by the Examiner.  Application Papers  9) The proper of the priority documents have been received to. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. § 119  12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some *c) None of:  Certified cop		Application No.	Applicant(s)					
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- The MAILING DATE of this communication appears on the cover sheef with the correspondence address - Period for Reply  A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  Bearenise of time may be available under the provision of 37 CFR 1.136(). In no event, thoewer, may a reply be timely filed  Bearenise of time may be available under the provision of 37 CFR 1.136(). In no event, thoewer, may a reply be timely filed  Bearenise of time may be available under the provision of 37 CFR 1.136(). In no event, thoewer, may a reply be timely filed  Bearenise of time may be available under the mailing date of the communication of the provision of the period for reply specified above is less than thery (30) days, a reply vilini the statutory minimum of timity (30) days will be considered inney.  If the period for reply specified above is less than thery (30) days, a reply vilini the term for the mailing date of this communication.  Fallow for the period for reply specified above is less than thery (30) days will be considered limited.  Provision of the communication (s) filed on 30 August 2004.  2a) If the cation is FINAL.  2b) This action is FINAL.  2b) This action is for the cation of allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims  4) Claim(s) 1, 2 and 4-g is/are pending in the application.  4a) Of the above claim(s) is/are withdrawn from consideration.  5) Claim(s) 1, 4-g silvare rejected.  7) Claim(s) 1, 4-g silvare rejected.  9) The specification is objected to by the Examiner.  10) The drawing(s) filed on 1 is/are: a) accepted or b) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheel(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The cath or declaration is objected to by the Examiner.  10) Acknowledgment is made of a claim for foreign priority under 35 U	Office Action Summary	Examiner	Art Unit					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Enterance of times may be available used in the provisions of 37 CFR 1.35(s). In no event, however, may a righty be timely filled  - Enterance of times may be available used in the provisions of 37 CFR 1.35(s). In no event, however, may a righty be timely filled  - Enterance of times may be available used in the provisions of 37 CFR 1.35(s). In no event, however, may a righty be timely filled  - If INO period for righty is aperified above, the maximum statistory pariod will apply and will capins SIX (8) MONTHS from the making disk of this communication. Provision of the communication of the communicat		Tho D. Ta	2833					
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3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  Attachment(s)  1) Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  5) Notice of Informal Patent Application (PTO-152)			ation No					
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#### **DETAILED ACTION**

## Claim Rejections - 35 USC § 112

- The following is a quotation of the second paragraph of 35 U.S.C. 112:
   The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 2. Claims 7-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 7 recites the limitation "the cable ferrule" in line 8. There is insufficient antecedent basis for this limitation in the claim.

### Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 1, 2, 4-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over de La Cruz et al. (6,616,482) in view of Saito et al. (6,428,364).

In regard to claim 1, De La Cruz et al. discloses a contact positioning assembly for a cable comprising: a plurality of contacts 11 attached to conductors 4 of an electrical cable 2, the conductors 4 secured in radially outward facing U-shaped slots 35 of a first spacer 34 for positioning the conductors 4, the number of slots 35 corresponding to the number of conductors 4 so that each slot 35 holds a single conductor 4 (column 4, lines 33-37); wherein the first spacer 34 is generally cylindrical-

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shaped with the slots 35 equally spaced around its circumference around its circumference; and wherein a base portion (adjacent 42) of the first spacer 34 engages rings 12 on the contacts 11 to hold the contacts 11 in a secure position to prevent the contacts 11 from sliding (fig. 1, column 4, lines 33-37).

However, De La Cruz does not disclose that the slots 35 are sized smaller than an outside diameter of the conductors 4 so as to provide a frictional interference between the slots 35 and conductors 4 for securely holding the conductors 4 in the slots 35.

Saito et al. discloses that the slots 53, 54 are sized smaller than an outside diameter of the conductors 50 so as to provide a frictional interference between the slots 53, 54 and conductors 50 for securely holding the conductors 50 in the slots 53, 54, thereby facilitating pressure-welding work of the conductors 50 (column 9, lines 10-15).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify De La Cruz et al invention by constructing the slots as disclosed by Saito et al. in order to facilitate the coupling of the conductors and thus the assembling time of a worker would be reduced.

In regard to claim 2, De La Cruz et al. discloses that there are four slots 35 and four conductors 4.

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In regard to claim 4, De La Cruz et al. discloses that the slots 35 are separated by walls 44, the walls 44 extending above the slots 35 and abutting a cable ferrule 10, the ferrule 10 securing the first spacer 34 between itself and the rings 26.

In regard to claim 5, De La Cruz et al. discloses that a second spacer 24 that slides over the contacts 11 and is positioned adjacent the first spacer 34.

In regard to claim 6, De La Cruz et al. discloses that the first spacer 34 is made of a dielectric material to provide electrical shielding.

In regard to claim 7, De La Cruz et al. discloses a spacer for positioning conductors 4 of an electrical cable 2 comprising: a generally cylindrical spacer 34 having U-shaped slots 35 equally spaced around the circumference of the spacer 34, the slots 35 having openings facing radially outward and the slots 35 being adapted to hold a single conductor 4 (column 4, lines 33-37); wherein a base portion (adjacent 42) of the spacer 34 is adapted to abut and secure contact rings 12, wherein the spacer 34 is secured between the cable ferrule 10 and the contact rings 12.

However, De La Cruz does not disclose that the slots 35 being dimensioned slightly smaller than the diameter of the conductors 4 so as to provide frictional interference to hold the conductors 4.

Saito et al. discloses that the slots 53, 54 are sized smaller than an outside diameter of the conductors 50 so as to provide a frictional interference between the

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slots 53, 54 and conductors 50 for securely holding the conductors 50 in the slots 53, 54, thereby facilitating pressure-welding work of the conductors 50 (column 9, lines 10-15).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify De La Cruz et al invention by constructing the slots as disclosed by Saito et al. in order to facilitate the coupling of the conductors and thus the assembling time of a worker would be reduced.

In regard to claim 8, De La Cruz et al. discloses that the spacer 34 is made of a dielectric material.

In regard to claim 9, De La Cruz et al. discloses that the slots 35 are separated by walls 44 that extend above the slots 35, a top portion of the walls 44 being adapted to abut a cable ferrule 10.

#### Response to Arguments

5. Applicant's arguments filed 8/30/04 have been fully considered but they are not persuasive.

In response to applicant's arguments that "De La Cruz et al. does not disclose that a base portion of a spacer engages rings on the contacts...". Contrary to applicant's argument, De La Cruz et al. discloses in fig. 1 and column 4, lines 33-37 that a base portion (adjacent 42) of a spacer 34 engages rings 12on the contacts 11.

In response to applicant's arguments that Saito et al. do not disclose or suggest rings on contacts. Examiner only applied Saito et al. for the teaching of the slots being dimensioned slightly smaller than the diameter of the conductors. Further, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

#### Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tho D. Ta whose telephone number is (571) 272-2014. The examiner can normally be reached on M-F (8:00-5:30).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula A. Bradley can be reached on (571) 272-2800 ext 33. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PRIMARY EXAMINER

tdt 05/25/04